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## What Is Claimed Is:

- 1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) a nucleotide sequence encoding any of the amino acid sequences of the polypeptides shown in Table 1; or
- (b) a nucleotide sequence complementary to any of the nucleotide sequences in (a).
- 2. An isolated nucleic acid molecule comprising a polynucleotide which hybridizes under stringent hybridization conditions to a polynucleotide having a nucleotide sequence identical to a nucleotide sequence in (a) or (b) of claim 1 wherein said polynucleotide which hybridizes does not hybridize under stringent hybridization conditions to a polynucleotide having a nucleotide sequence consisting of only A residues or of only T residues.
- 3. An isolated nucleic acid molecule comprising a polynucleotide which encodes the amino acid sequence of an epitope-bearing portion of a polypeptide having an amino acid sequence in (a) of claim 1.
- 4. The isolated nucleic acid molecule of claim 3, wherein said epitope-bearing portion of a polypeptide has an amino acid sequence listed in Table 2.
- 5. A method for making a recombinant vector comprising inserting an isolated nucleic acid molecule of claim 1 into a vector.
  - 6. A recombinant vector produced by the method of claim 5.
- 7. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 6 into a host cell.
  - 8. A recombinant host cell produced by the method of claim 7.
- 9. A method of producing a polypeptide encoded by the nucleic acid molecule of claim 1 comprising culturing the host cell of claim 8 under conditions favoring expressing the heterologous polypeptide.

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- 10. A polypeptide produce according to the method of claim 9.
- 11. An isolated polypeptide comprising an amino acid sequence at least 70% identical to a sequence selected from the group consisting of an amino acid sequence of any of the polypeptides described in Table 1. $\checkmark$
- 12. An isolated polypeptide antigen comprising an amino acid sequence of an S. pneumoniae epitope shown in Table 2.
- 13. An isolated nucleic acid molecule comprising a polynucleotide with a nucleotide sequence encoding a polypeptide of claim 9.
- 14. An isolated antibody that binds specifically to a polypeptide of claim 11.
  - 15. A hybridoma which produces an antibody according to claim 14.
  - 16. A vaccine, comprising
- (1) one of more *S. pnueroniae* polypeptides selected from the group consisting of a polypeptide comprising an amino acid sequence identified in Table 1, or a fragment thereof; and
- (2) a pharmaceutically acceptable diluent, carrier, or excipient; wherein said polypeptide is present, in an amount effective to elicit protective antibodies in an animal to a member of the *Streptococcus* genus.
- 17. A method of preventing or attenuating an infection caused by a member of the *Streptococcus* genus in an animal, comprising administering to said animal a polypeptide of claim 11, wherein said polypeptide is administered in an amount effective to prevent of attenuate said infection.
- 18. A method of detecting *Streptococcus* nucleic acids in a biological sample obtained from an animal involving assaying for one or more nucleic acid sequences encoding *Streptococcus* polypeptides in a sample comprising:
- (a) contacting the sample with one or more of the above-described nucleic acid probes, under conditions such that hybridization occurs, and
- (b) detecting hybridization of said one or more probes to the one or more *Streptococcus* nucleic acid sequences present in the biological sample.

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- 19. A method of detecting *Streptococcus* nucleic acids in a biological sample obtained from an animal, comprising:
- (a) amplifying one or more *Streptococcus* nucleic acid sequences in said sample using polymerase chain reaction, and
  - (b) detecting said amplified Strococcus nucleic acid.
- 20. A kit for detecting *Streptococcus* antibodies in a biological sample obtained from an animal, comprising
  - (a) a polypeptide of claim 12 attached to a solid support; and
  - (b) detecting means.
- 21. A method of detecting *Streptococcus* antibodies in a biological sample obtained from an animal, comprising
  - (a) contacting the sample with a polypeptide of claim 12; and
  - (b) detecting antibody-antigen complexes.

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